

## ABSTRACT OF THE DISCLOSURE

An intervertebral prosthesis includes a disc member dimensioned for insertion within an intervertebral space between adjacent vertebrae to replace at least a portion of an intervertebral disc removed therefrom. The disc member has sufficient rigidity to support the adjacent vertebrae in spaced relation, and defines a longitudinal axis extending the height of the disc member and a lateral axis transverse to the longitudinal axis. The disc member includes an exterior wall which has a slit defined therein. The slit defines a longitudinal component of direction and a lateral component of direction. Preferably, the exterior wall includes a plurality of helical slits, adjacent slits being disposed in at least partial overlapping relation to define an overlapping region. Upon insertion of the disc member within the intervertebral space with the support surfaces in contacting engagement with respective vertebral portions of the adjacent vertebrae, forces exerted by the vertebral portions on the support surfaces are transferred along the exterior wall through the overlapping region.